

# **A new species of the genus *Mycalesis* from the hill evergreen forest of northern Thailand (Lepidoptera: Satyridae)**

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**Abstract** *Mycalesis inayoshii* sp. nov. is described from northern Thailand. It is similar to *M. mestra* from Sikkim to Myanmar.

**Key words** Lepidoptera, Satyridae, *Mycalesis inayoshii* sp. nov., Thailand.

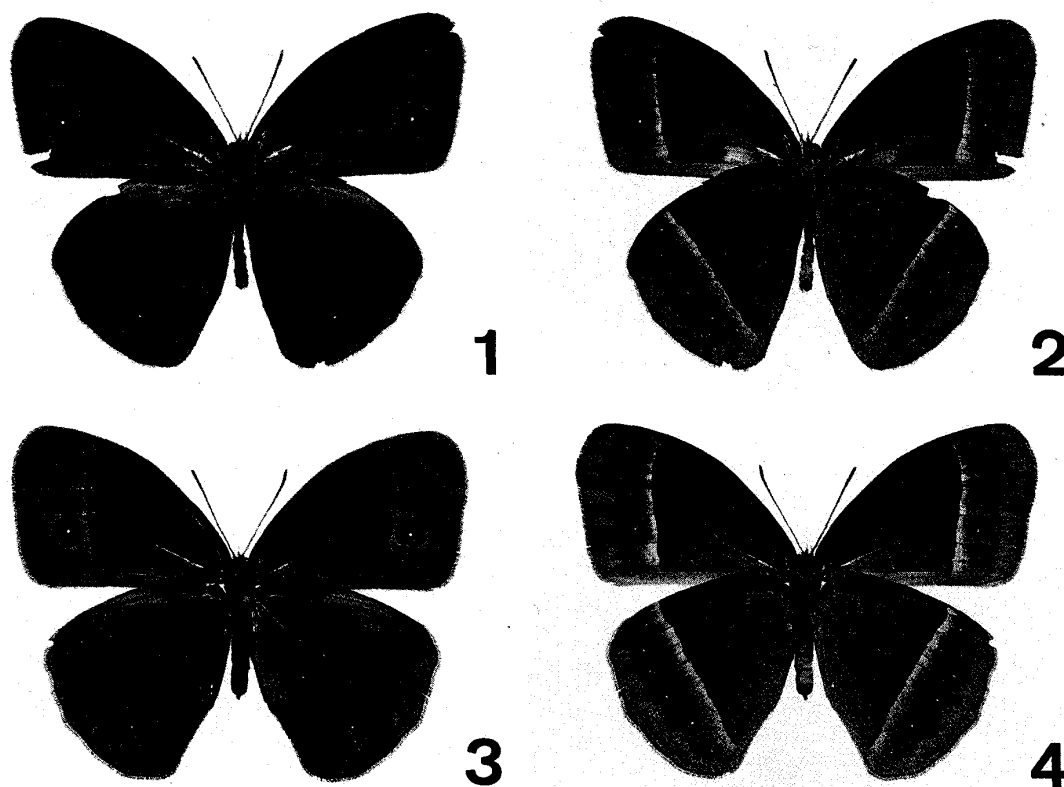
About 100 species of the genus *Mycalesis* are known in the Indo-Australian region, and 26 species of the genus have so far been known to inhabit Thailand (Aoki and Yamaguchi, 1984; Pinratana and Eliot, 1988). In 1991, Mr Yutaka Inayoshi collected several specimens of an interesting species of the genus at Nan Province, North Thailand and it is considered to be new to science. In this paper, we describe it as a new species.

## ***Mycalesis inayoshii* sp. nov. (Figs 1-6)**

Male (Figs 1-2). Forewing termen almost straight from vein  $M_2$  to  $1A+2A$ ; vein  $R_2$  from posterior angle of cell. Hindwing termen only slightly arched outwards, weakly scalloped; veins  $M_3$  and  $CuA_1$  separated at base. Upperside of forewing: Deep brown in ground colour, outer discal area slightly paler towards outer margin; marginal pale ochraceous-brown line conjoined with costal one; large, pupilled yellow-ringed black ocellus present in the middle of space  $CuA_1-CuA_2$ ; much smaller, pupilled ocellus usually present in space  $M_1-M_2$ ; cilia greyish-brown, apically whitish. Upperside of hindwing: Deep brown in ground colour; marginal pale ochraceous-brown line; small, pupilled yellow-ringed black ocellus present in space  $CuA_1-CuA_2$ ; cilia greyish-brown, apically whitish; ovate and deep brown-coloured sexual-brand situated astride vein  $R_s$ , about 2.8 mm in length; hairpencil present at base of cell, about 5.5 mm in length. Underside of forewing: Deep brown in ground colour, slightly paler than in upperside, with obscure striation; yellowish-white postdiscal band tapering towards costa, distinct from vein  $R_5$  to  $1A+2A$ , with its innerside edged with darker brown; small, pupilled yellow-ringed black ocellus present in space  $CuA_1-CuA_2$ ; ocelli reduced to minute white speckles, from  $CuA_1-R_5$ , sometimes obsolete from  $CuA_1$  to  $M_2$  and from  $M_1$  to  $R_5$ ; pale ochraceous-brown submarginal band broad, with its inner edge waved; pale ochraceous-brown marginal line almost conjoined with submarginal band; oval and deep brown-coloured sexual-brand situated above vein  $1A+2A$ , about 2.8 mm in length. Underside of hindwing: Deep brown in ground colour, paler than upperside, with obscure striation; yellowish-white postdiscal band distinct, with its inner side edged with darker brown; small, pupilled yellow-ringed black ocellus present in space  $CuA_1-CuA_2$ ; much smaller ocellus present in space  $CuA_2-1A+2A$ ; ocelli reduced to minute white speckles, from  $CuA_1$  to  $R_5$ ; pale ochraceous-brown submarginal band broad, tapering near apex and tornus, with its inner edge waved; pale ochraceous-brown marginal line almost conjoined with submarginal band.

Length of forewing. 30.2-32.9 mm (average 31.3 mm;  $n=7$ ).

Genitalia (Fig. 5). Tegumen in dorsal view broad, anterior margin finger-shaped deeply concave medially, in lateral view rectangular, rather well-produced anteriorly; appendix



Figs 1-2. *Mycalesis inayoshii* sp. n., holotype, ♂. 1. Upperside. 2. Underside.  
 Figs 3-4. *Mycalesis inayoshii* sp. n., paratype, ♀. 1. Upperside. 2. Underside.

angularis short and broad, weakly hooked at apex; vinculum strongly curved posteroventrally, about 0.6 times as long as height of ring; saccus 0.3 times as long as height of ring; uncus slightly shorter than tegumen, 0.4 times as long as dorsum, in dorsal view broad at base and abruptly narrowed posteriorly, in lateral view slightly curved ventrally, dorsal margin strongly bulged at middle, thence tapering posteriorly and pointed at apex; brachium long, 0.6 times as long as dorsum, normally sinuated with acutely pointed apex, base of brachium connected with posteroventral corner of tegumen; valva in dorsal view weakly curved inwards, in lateral view 1.3 times as long as dorsum, broad at basal 3/5 and strongly narrowed beyond the middle, apical half gradually tapering towards apex with small serration on its dorsal margin and apex; costa long and narrow, continuous to ampulla+harpe; juxta broad, Y-shaped; phallus long, 1.4 times as long as dorsum, in lateral view curved dorsally, subzonal sheath 0.3 times as long as phallus, with several spines at apex of suprazonal sheath.

Female (Figs 3-4). Similar to male, but slightly larger; ground colour usually paler; sexual-brand and hairpencil absent.

Length of forewing. 33.1-33.3 mm (average 33.2 mm; n=2).

Genitalia (Fig. 6). Lodix developed covering about 1/2 of 7th abdominal segment with numerous short hairs on its posterior portion; intersegmental membrane between 7th and 8th abdominal venter well sclerotized, posterior margin weakly concave medially; lamella antevaginalis with a tongue-shaped central process with its posterior margin bifurcated; lateral process of lamella antevaginalis rectangular, posterior margin more or less weakly serrated; lamella postvaginalis with a short and rounded central process;

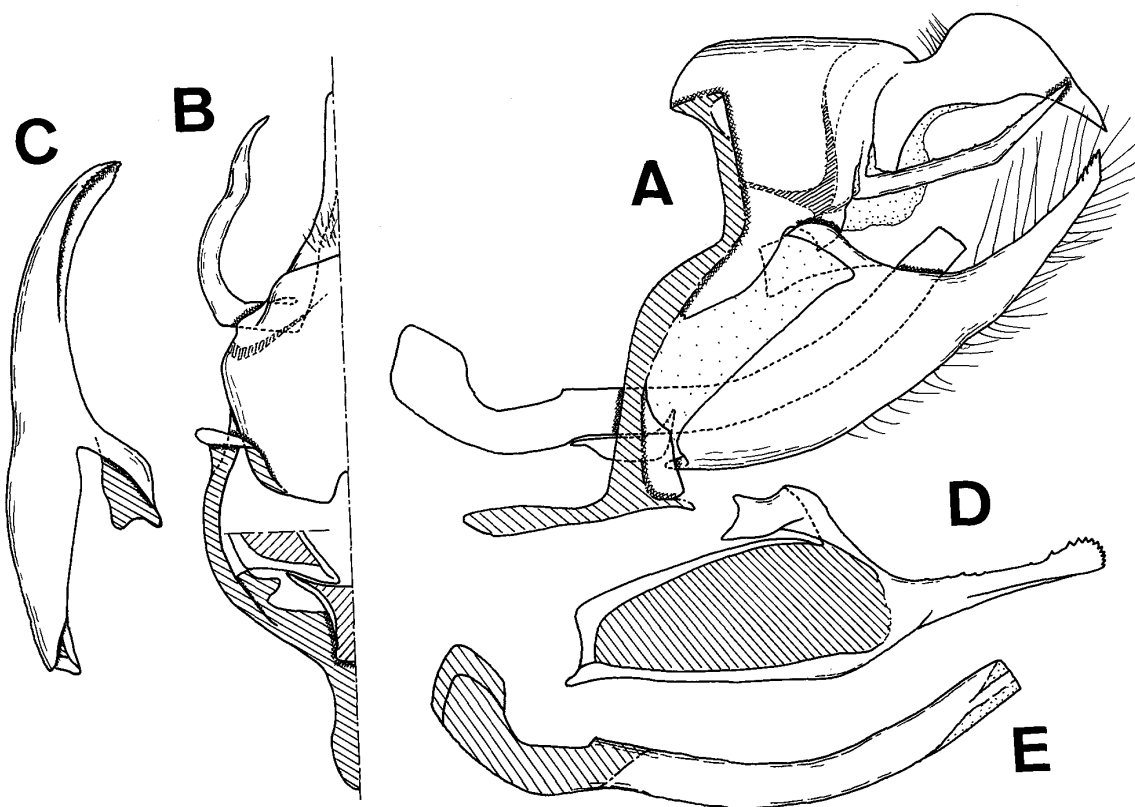


Fig. 5. Male genitalia of *Mycalesis inayoshii* sp. n., paratype. A: Whole genitalia, lateral aspect. B: Dorsum, dorsal aspect. C: Right valva, inner aspect. D: Right valva, dorsal aspect. E: Phallus, lateral aspect.

ductus bursae about 0.7 times as long as corpus bursae; caudal portion of ductus bursae well sclerotized; ductus seminalis attaching slightly before sclerotized portion of ductus bursae; corpus bursae guttiform; papilla analis elongated.

Type material. Holotype: ♂, THAILAND, Nan Prov., Doi Phu Kha, 5. IV. 1993 (RIEB). Paratypes (52 ♂ 4 ♀): THAILAND, Nan Prov., Doi Phu Kha, 1 ♂, 14. III. 1991, Y. Inayoshi leg. (YI); 1 ♂, 14. IV. 1991 (YI); 1 ♂, 12. X. 1991 (YI); 2 ♂, 22. III. 1992 (YI); 2 ♂, 23. III. 1992 (1 ♂ YI, 1 ♂ PS); 3 ♂, 24. III. 1992 (2 ♂ YI, 1 ♂ PS); 5 ♂, 25. III. 1992 (3 ♂ YI, 2 ♂ PS); 1 ♂, 26. III. 1992, P. Sukkit leg. (YI, ♂ genitalia SA404 RIEB); 2 ♂, 26. III. 1992 (1 ♂ YI, 1 ♂ PS); 2 ♂, 28. III. 1992 (1 ♂ YI, 1 ♂ PS); 2 ♂, 31. III. 1992 (YI); 1 ♂, 2. IV. 1992 (PS); 6 ♂, 5. IV. 1992 (1 ♂ TME, 2 ♂ PS, 3 ♂ MN); 1 ♂, 6. IV. 1992 (PS); 7 ♂, 7. IV. 1992 (2 ♂ YI, 5 ♂ PS); 3 ♂, 8. IV. 1992 (2 ♂ YI, 1 ♂ PS); 3 ♂ 1 ♀, 13. IV. 1992 (1 ♀ YI, 3 ♂ PS); 1 ♂, 15. IV. 1992 (TME); 1 ♂, 16. IV. 1992 (PS); 1 ♀, 19. IV. 1992 (YI); 1 ♀, 24. IV. 1992 (YI, ♀ genitalia SA405 RIEB); 1 ♀, 23. IX. 1992 (PS); 1 ♂, 1. IV. 1993 (RIEB); 1 ♂, 2. IV. 1993 (RIEB); 1 ♂, 5. IV. 1993 (RIEB); 1 ♂, 6. IV. 1993 (RIEB); 3 ♂, 7. IV. 1993 (RIEB).

Type depository. RIEB—Research Institute of Evolutionary Biology, Setagaya, Tokyo; TME—Toyosato Museum of Entomology, Tsukuba, Ibaraki; YI—Collection of Y. Inayoshi, Utsunomiya, Tochigi; PS—Collection of P. Sukkit, Mae Hong Son, Thailand; MN—Collection of M. Nishimura, Akishima, Tokyo.

Distribution. Thailand

Habitat. This species inhabits hill evergreen forest (about 2100–2200 m alt.). Under the existing conditions it seems to be very local and rare. According to Mr Inayoshi (*pers.*

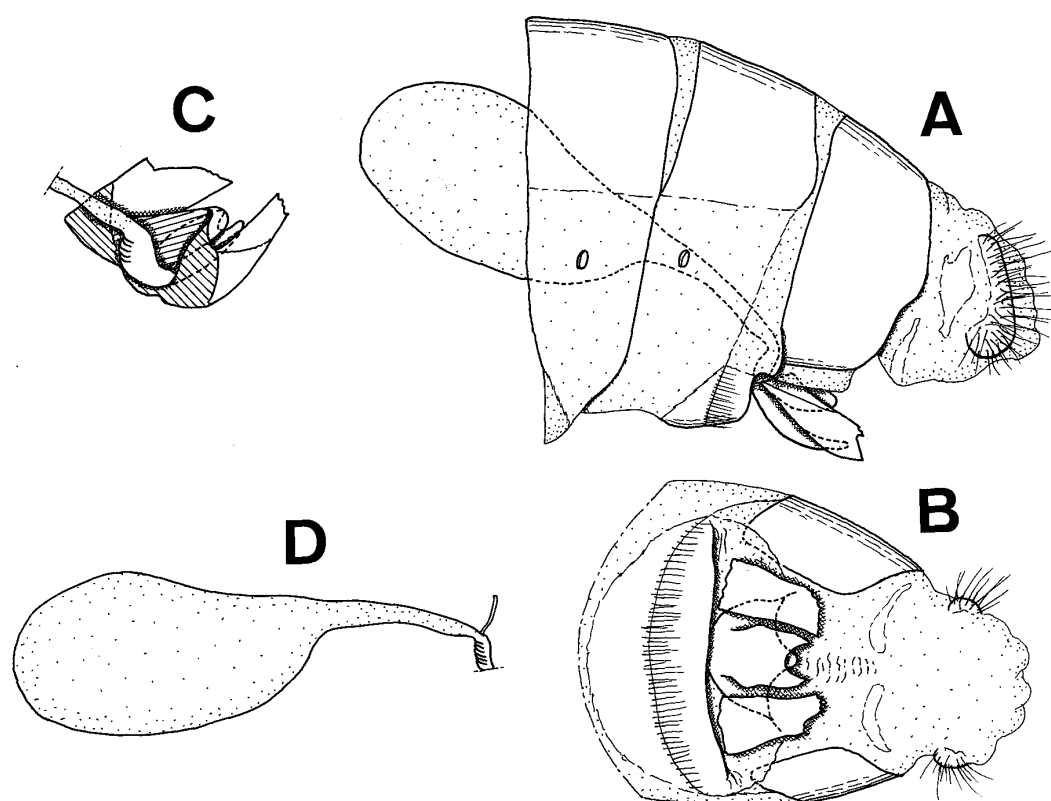


Fig. 6. Female genitalia of *Mycalesis inayoshii* sp. n., paratype. A: Whole genitalia, lateral aspect. B: Whole genitalia, ventral aspect. C: Lamellae antevaginalis and postvaginalis, inner aspect. D: Bursa copulatrix, lateral aspect.

*comm.*), the habitats of this species are found in hill evergreen forest with the undergrowth of the dense thicket of bamboo (? *Arundinaria*). The butterflies usually fly near the ground, below about 0.6 m.

Remarks. This new species belongs to the *nicotia* group (Evans, 1932; Talbot, 1949; Aoki *et al.*, 1982) and is most closely related to *M. mestra* in view of male genitalia, but is easily distinguished from the latter by the broader pale ochraceous-brown submarginal band on underside, greyish-brown cilia, and reduced ocelli on underside. This butterfly is found flying in March, April, September and October, but seasonal variation is unknown. The name of this new species is dedicated to Mr Yutaka Inayoshi, who is a student of Oriental butterflies and the discoverer of this species.

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## 摘 要

タイ北部の山地常緑林に生息するコジャノメ属 (*Mycalesis*) の1新種 (青木俊明・山口就平)

タイ北部で得られたコジャノメ属の1新種, *Mycalesis inayoshii* を記載した. 本種は北タイのラオス国境に近いナン地方の山地に分布し, 山地常緑林に生息している. 本種の斑紋は, 一見 *M. francisca* に似るが, 雄前翅表面の性標を欠き, 前翅  $R_2$  脈は中室端より派生, 後翅  $CuA_1$  脈は中室端の手前より派生し, その基点は  $M_3$  脈と離れるなどの特徴により, いわゆる *nicotia* 種群に含まれる. *Nicotia* 種群は多様な種を含むが, 本種の雄交尾器は北インドから北ビルマ (ミャンマー) に分布する *M. mestra* によく似ており, 明らかに近縁であると考えられる. しかし, 本種の斑紋は裏面の眼状紋が減退すること, 外縁部が黄褐色であることなどにより, 一見して *M. mestra* と区別出来る.

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